

AMENDMENTS TO THE CLAIMS

Please amend claim 1, and add new claims 8 – 24, as set forth in the attached listing of claims that follows:

Listing of Claims

(insert listing of claims)

1. (currently amended) ~~Apparatus~~ An apparatus for measuring a cinching tension on a child seat placed on a bottom cushion of a vehicle seat, said vehicle seat having a pressure sensor disposed therein operative to monitor the weight of an occupant and provide an occupant weight output signal to an occupant detection system electronic control unit, said child seat having first and second tether straps affixed thereto for cinching said child seat to said vehicle seat independently of an occupant restraining seat belt system associated with said vehicle seat, said apparatus comprising:

first and second laterally spaced child seat anchor brackets straddling said child seat in proximity to said bottom cushion, said first and second child seat anchor brackets being adapted to tensively secure said first and second tether straps to said vehicle seat, respectively;

an anchor frame extending across a lateral width dimension of the vehicle seat and secured to a frame of the vehicle seat; and

a first tension sensor securing said first child seat anchor bracket to a first end of said anchor frame, and a second tension sensor securing said second child seat anchor bracket to a second end of said anchor frame, said first and second tension sensors each providing a discrete output signal to said occupant detection system electronic control unit.

2. (previously amended) The apparatus of Claim 1, wherein each of said first and second tension sensors includes a first portion rigidly secured to said anchor frame and a second portion integral with a respective child seat anchor bracket.

3. (withdrawn) Apparatus for measuring tension exerted on a child seat anchor bracket of a vehicle seat, comprising:

an anchor frame rigidly secured to the anchor bracket, and secured to a frame of the vehicle seat; and

a tension sensor including a first portion coupled to said anchor frame and a second portion coupled to the seat frame.

4. (withdrawn) The apparatus of Claim 3, wherein said anchor frame is secured to the seat frame by a pivot coupling, and the first portion of said sensor is coupled to said anchor frame between said pivot joint and said anchor bracket.

5. (withdrawn) The apparatus of Claim 3, wherein said anchor frame extends laterally across said seat, and first and second child seat anchor brackets are rigidly secured to laterally opposite ends of said anchor frame such that said first and second anchor brackets are disposed in a gap between back and bottom cushions of said seat.

6. (withdrawn) The apparatus of Claim 5, wherein the first portion of said sensor is coupled to said anchor frame at a point intermediate said first and second child seat anchor brackets.

7. (withdrawn) The apparatus of Claim 6, wherein said anchor frame is secured to the seat frame by a pivot coupling, and the first portion of said sensor is coupled to said anchor frame at a point intermediate said pivot joint and said anchor brackets.

8. (NEW) In a vehicle seat assembly including a generally vertically disposed back cushion, a seat portion including a generally horizontally disposed bottom cushion and a seat frame, pressure sensor means disposed within said seat portion

operative to monitor the weight of an occupant and provide an occupant weight output signal to an occupant detection system electronic control unit, and an occupant restraining seat belt, an apparatus for measuring a cinching tension exerted on a child seat disposed on said bottom cushion, said child seat having a plurality of tether straps for cinching said child seat to said vehicle seat assembly, said apparatus comprising:

a plurality of laterally spaced child seat anchor brackets straddling said child seat, each anchor bracket extending through a juncture gap between the back and bottom cushions and adapted to tensively secure a corresponding tether strap affixed to said child seat; and

a tension sensor mountingly coupled between said seat frame and at least one of said child seat anchor brackets, said tension sensor operative to provide a tension sensor output signal to said occupant detection system electronic control unit.

9. (NEW) The apparatus of Claim 8, wherein said occupant detection system electronic control unit is operative to generate a vehicle restraint actuation signal as a function of said occupant weight output signal and said tension sensor output signal.

10. (NEW) The apparatus of Claim 8, further comprising an anchor frame mechanically interconnecting said seat frame and said tension sensor.

11. (NEW) The apparatus of Claim 10, wherein said anchor frame is rigidly affixed to said seat frame.

12. (NEW) The apparatus of Claim 10, wherein said anchor frame is secured to said seat frame by a pivot coupling.

13. (NEW) The apparatus of Claim 10, wherein said anchor frame defines a pocket area for nestingly receiving and securing said tension sensor therein.

14. (NEW) The apparatus of Claim 13, wherein said pocket area is integrally formed adjacent one lateral end of said anchor frame.

15. (NEW) The apparatus of Claim 10, wherein said anchor frame defines surface contours therein to enhance characteristic stiffness of said anchor frame.

16. (NEW) The apparatus of Claim 15, wherein said surface contours are integrally formed in said anchor frame as a plurality of laterally spaced depressions therein.

17. (NEW) The apparatus of Claim 8, wherein said apparatus comprises a plurality of tension sensors, one tension sensor associated with each child seat anchor bracket.

18. (NEW) The apparatus of Claim 17, wherein each said tension sensor is operative to provide an associated tension sensor output signal to said occupant detection system electronic control unit.

19. (NEW) The apparatus of Claim 10, wherein said apparatus comprises a tension sensor associated with each said child seat anchor bracket, each of said tension sensors including a first portion rigidly secured to said anchor frame and a second portion integral with a corresponding child seat anchor bracket.

20. (NEW) The apparatus of Claim 8, further comprising:
an anchor frame rigidly secured to each anchor bracket, and secured to the seat frame,
said tension sensor including a first portion coupled to said anchor frame and a second portion coupled to the seat frame.

21. (NEW) The apparatus of Claim 20, wherein said anchor frame is secured to the seat frame by a pivot coupling, and the first portion of said sensor is coupled to said anchor frame between said pivot joint and said anchor bracket.

22. (NEW) The apparatus of Claim 20, wherein said anchor frame extends laterally across said seat, and each child seat anchor brackets is rigidly secured to laterally opposite ends of said anchor frame such that each of said anchor brackets are at least partially disposed in said juncture gap between back and bottom cushions of said vehicle seat.

23. (NEW) The apparatus of Claim 22, wherein the first portion of said sensor is coupled to said anchor frame at a point intermediate first and second child seat anchor brackets.

24. (NEW) The apparatus of Claim 23, wherein said anchor frame is secured to the seat frame by a pivot coupling, and the first portion of said sensor is coupled to said anchor frame at a point intermediate said pivot joint and said anchor brackets.